

Search Plan and Results

Question

[What is the relationship between diet self-monitoring and body weight? \(DGAC 2010\)](#)

Date Searched

12/14/2009

Inclusion Criteria

- January 2000 to present
- Systematic reviews and meta-analysis, randomized controlled trials or clinical controlled studies, large non-randomized observational studies, cohort, case-control studies
- Human subjects
- The sample size must equal 10 adults for each study group. For example, this would include 10 patients in the intervention group and 10 patients in the control or comparison group.
- Less than 20%; preference for smaller dropout rates
- English language
- International
- *Ages:* 19 years and older
- Healthy and those with elevated chronic disease risk.

Exclusion Criteria

- Medical treatment or therapy
- Cross-sectional studies
- Narrative reviews, cross-sectional studies
- *Ages:* Children under age 18 years
- Diseased subjects (already diagnosed with disease related to study purpose)
- Hospitalized patients
- Malnourished or third-world populations or disease incidence not relative to US population (e.g., malaria)
- Animal studies
- In vitro studies
- Articles not peer reviewed (websites, magazine articles, Federal reports, etc.).

Search Terms: Search Vocabulary

("body weight"[mh] OR adiposity[mh] OR "Body Mass Index"[mh] OR "Overweight"[mh] OR "Obesity"[mh] OR "Weight Gain"[mh] OR "Waist-Hip Ratio"[Mesh]) AND (diet[mh] OR "diet records" OR "food habits") AND (self AND

monitoring)

Electronic Databases

PubMed.

Total hits from all electronic database searches: 69

Total articles identified to review from electronic databases: 33

Articles Identified Via Handsearch or Other Means

Summary of Articles Identified to Review

Number of Primary Articles Identified: 7

Number of Review Articles Identified: 0

Total Number of Articles Identified: 7

Number of Articles Reviewed but Excluded: 26

List of Articles Included for Evidence Analysis

Randomized Controlled Trials (6)

Adachi Y, Sato C, Yamatsu K, Ito S, Adachi K, Yamagami T. [A randomized controlled trial on the long-term effects of a 1-month behavioral weight control program assisted by computer tailored advice.](#) Behav Res Ther. 2007 Mar; 45 (3): 459-470. Epub 2006 May 22. PMID: 16713991.

Carels RA, Young KM, Coit C, Clayton AM, Spencer A, Hobbs M. [Can following the caloric restriction recommendations from the Dietary Guidelines for Americans help individuals lose weight?](#) Eat Behav. 2008 Aug; 9 (3): 328-335. Epub 2008 Jan 4. PMID: 18549992.

Helsel DL, Jakicic JM, Otto AD. [Comparison of techniques for self-monitoring eating and exercise behaviors on weight loss in a correspondence-based intervention.](#) J Am Diet Assoc. 2007 Oct; 107 (10): 1, 807-1, 810. PMID: 17904942.

Lowe MR, Tappe KA, Annunziato RA, Riddell LJ, Coletta MC, Crerand CE, Didie ER, Ochner CN, McKinney S. [The effect of training in reduced energy density eating and food self-monitoring accuracy on weight loss maintenance.](#) Obesity (Silver Spring). 2008 Sep; 16

(9): 2, 016-2, 023. PMID: 18483475.

Tate DF, Wing RR, Winett RA. [Using Internet technology to deliver a behavioral weight loss program](#). *JAMA*. 2001 Mar 7; 285 (9): 1, 172-1, 177. PMID: 11231746.

Wylie-Rosett J, Swencionis C, Ginsberg M, Cimino C, Wassertheil-Smoller S, Caban A, Segal-Isaacson CJ, Martin T, Lewis J. [Computerized weight loss intervention optimizes staff time: The clinical and cost results of a controlled clinical trial conducted in a managed care setting](#). *J Am Diet Assoc*. 2001 Oct; 101 (10): 1, 155-1, 162; quiz 1, 163-1, 164. PMID: 11678486.

Non-Randomized Controlled Trials (1)

Yon BA, Johnson RK, Harvey-Berino J, Gold BC, Howard AB. [Personal digital assistants are comparable to traditional diaries for dietary self-monitoring during a weight loss program](#). *J Behav Med*. 2007 Apr; 30 (2): 165-175. Epub 2007 Jan 10. PMID: 17216341.

List of Excluded Articles with Reason

Article	Reason for Exclusion
Alm ME, Neumark-Sztainer D, Story M, Boutelle KN. Self-weighing and weight control behaviors among adolescents with a history of overweight . <i>J Adolesc Health</i> . 2009 May; 44 (5): 424-430. Epub 2008 Dec 6. PMID: 19380088.	Did not answer question; examined weight self-monitoring; study subjects are children.
Aoun S, Osseiran-Moissen R, Collins F, Newton R, Newton M. A self-management concept for men at the community level: The 'Waist' Disposal Challenge . <i>J Health Psychol</i> . 2009 Jul; 14 (5): 663-674. PMID: 19515681.	Did not answer question; examined weight self-monitoring.
Artal R, Catanzaro RB, Gavard JA, Mostello DJ, Friganza JC. A lifestyleintervention of weight-gain restriction: Diet and exercise in obese women with gestational diabetes mellitus . <i>Appl Physiol Nutr Metab</i> . 2007 Jun; 32 (3): 596-601. PMID: 17510701.	Participants diagnosed with gestational diabetes; did not answer question; examined blood glucose self-monitoring.
Borg P, Fogelholm M, Kukkonen-Harjula K. Food selection and eating behaviour during weight maintenance intervention and 2-year follow-up in obese men . <i>Int J Obes Relat Metab Disord</i> . 2004 Dec; 28 (12): 1, 548-1, 554. PMID: 15543160.	Study did not include diet self-monitoring in analyses.
Burke LE, Swigart V, Warziski Turk M, Derro N, Ewing LJ. Experiences of self-monitoring: Successes and struggles during treatment for weight loss . <i>Qual Health Res</i> . 2009 Jun; 19 (6): 815-828. Epub 2009 Apr 13. PMID: 19365099.	Study design is cross-sectional.

<p>Burns CM, Tijhuis MA, Seidell JC. The relationship between quality of life and perceived body weight and dieting history in Dutch men and women. <i>Int J Obes Relat Metab Disord</i>. 2001 Sep; 25 (9): 1, 386-1, 392. PMID: 11571604.</p>	<p>Study did not include diet self-monitoring in analyses.</p>
<p>Butryn ML, Phelan S, Hill JO, Wing RR. Consistent self-monitoring of weight: a key component of successful weight loss maintenance. <i>Obesity (Silver Spring)</i>. 2007 Dec; 15 (12): 3, 091-3, 096. PMID: 18198319.</p>	<p>Did not answer question; examined weight self-monitoring.</p>
<p>Byrne NM, Meierkin JD, Laukkonen R, Ross R, Fogelholm M, Hills AP. Weight loss strategies for obese adults: Personalized weight management program vs. standard care. <i>Obesity (Silver Spring)</i>. 2006 Oct; 14 (10): 1, 777-1, 788. PMID: 17062808</p>	<p>Study did not include diet self-monitoring in analyses.</p>
<p>Carels RA, Darby LA, Rydin S, Douglass OM, Cacciapaglia HM, O'Brien WH. The relationship between self-monitoring, outcome expectancies, difficulties with eating and exercise, and physical activity and weight loss treatment outcomes. <i>Ann Behav Med</i>. 2005 Dec; 30 (3): 182-190. PMID: 16336069.</p>	<p>Did not answer question; examined exercise self-monitoring.</p>
<p>Carels RA, Young KM, Wott CB, Harper J, Gumble A, Oehlof MW, Clayton AM. Weight bias and weight loss treatment outcomes in treatment-seeking adults. <i>Ann Behav Med</i>. 2009 Jun; 37 (3): 350-355. Epub 2009 Jun 23. PMID: 19548044.</p>	<p>Did not answer question; did not examine the relationship between self-monitoring of diet and weight.</p>
<p>Hankó B, Kázmér M, Kumli P, Hrágyel Z, Samu A, Vincze Z, Zelkó R. Self-reported medication and lifestyle adherence in Hungarian patients with Type 2 diabetes. <i>Pharm World Sci</i>. 2007 Apr; 29 (2): 58-66. Epub 2006 Dec 23. PMID: 17187222.</p>	<p>Did not answer question; examined blood glucose self-monitoring; participants diagnosed with type 2 diabetes.</p>
<p>Hauenschild A, Ewald N, Schnell-Kretschmer H, Porsch-Oezcueruemez M, Kloer HU, Hardt PD. Successful long-term treatment of severe hypertriglyceridemia by feedback control with lipid self-monitoring. <i>Ann Nutr Metab</i>. 2008; 52 (3): 215-220. Epub 2008 Jun 11. PMID: 18544976.</p>	<p>Did not answer question; examined blood lipid self-monitoring.</p>
<p>Heetderks-Cox MJ, Alford BB, Bednar CM, Heiss CJ, Tauai LA, Edgren KK. CD-ROM nutrient analysis database assists self-monitoring behavior of active duty Air Force personnel receiving nutrition counseling for weight loss. <i>J Am Diet Assoc</i>. 2001 Sep; 101 (9): 1, 041-1, 046. PMID: 11573756</p>	<p>Did not answer question; did not examine the relationship between self-monitoring of diet and weight.</p>

<p>Hoy MK, Winters BL, Chlebowski RT, Papoutsakis C, Shapiro A, Lubin MP, Thomson CA, Grosvenor MB, Copeland T, Falk E, Day K, Blackburn GL. <u>Implementing a low-fat eating plan in the Women's Intervention Nutrition Study</u>. <i>J Am Diet Assoc.</i> 2009 Apr; 109 (4): 688-696. PMID: 19328264.</p>	<p>Did not include diet self-monitoring in analyses.</p>
<p>Lally P, Chipperfield A, Wardle J. <u>Healthy habits: efficacy of simple advice on weight control based on a habit-formation model</u>. <i>Int J Obes (Lond)</i>. 2008 Apr; 32 (4): 700-707. Epub 2007 Dec 11. PMID: 18071344.</p>	<p>Did not answer question; examined weight self-monitoring.</p>
<p>Lombard CB, Deeks AA, Ball K, Jolley D, Teede HJ. <u>Weight, physical activity and dietary behavior change in young mothers: short term results of the HeLP-her cluster randomized controlled trial</u>. <i>Nutr J</i>. 2009 May 1; 8: 17. PMID: 19409085.</p>	<p>Did not answer question; examined weight self-monitoring.</p>
<p>McClung HL, Sigrist LD, Smith TJ, Karl JP, Rood JC, Young AJ, Bathalon GP. <u>Monitoring energy intake: A hand-held personal digital assistant provides accuracy comparable to written records</u>. <i>J Am Diet Assoc.</i> 2009 Jul; 109 (7): 1, 241-1, 245. PMID: 19559143</p>	<p>Did not include weight in analyses.</p>
<p>Mossavar-Rahmani Y, Henry H, Rodabough R, Bragg C, Brewer A, Freed T, Kinzel L, Pedersen M, Soule CO, Vosburg S. <u>Additional self-monitoring tools in the dietary modification component of The Women's Health Initiative</u>. <i>J Am Diet Assoc.</i> 2004 Jan; 104 (1): 76-85. PMID: 14702588.</p>	<p>Did not answer question; did not examine the relationship between self-monitoring of diet and weight.</p>
<p>Murawski ME, Milsom VA, Ross KM, Rickel KA, DeBraganza N, Gibbons LM, Perri MG. <u>Problem solving, treatment adherence, and weight-loss outcome among women participating in lifestyle treatment for obesity</u>. <i>Eat Behav</i>. 2009 Aug; 10 (3): 146-151. Epub 2009 Mar 29. PMID: 19665096.</p>	<p>Did not include diet self-monitoring in analyses.</p>
<p>Nothwehr F, Dennis L, Wu H. <u>Measurement of behavioral objectives for weight management</u>. <i>Health Educ Behav</i>. 2007 Oct; 34 (5): 793-809. Epub 2006 Jun 30. PMID: 16816028.</p>	<p>Study design is cross-sectional.</p>
<p>Nothwehr F, Peterson NA. <u>Healthy eating and exercise: Strategies for weight management in the rural midwest</u>. <i>Health Educ Behav</i>. 2005 Apr; 32 (2): 253-263. PMID: 15749970.</p>	<p>Study design is cross-sectional.</p>

<p>O'Brien KM, LeBow MD. <u>Reducing maladaptive weight management practices: Developing a psychoeducational intervention program.</u> <i>Eat Behav.</i> 2007 Apr; 8 (2): 195-210. Epub 2006 Jun 28. PMID: 17336790.</p>	<p>Participants diagnosed with bulimia; did not include weight in analyses.</p>
<p>Wing RR, Jeffery RW. <u>Prescribed "breaks" as a means to disrupt weight control efforts.</u> <i>Obes Res.</i> 2003 Feb; 11 (2): 287-291. PMID: 12582226</p>	<p>Did not answer question; did not examine the relationship between self-monitoring of diet and weight.</p>
<p>Wing RR, Phelan S. <u>Long-term weight loss maintenance.</u> <i>Am J Clin Nutr.</i> 2005 Jul; 82 (1 Suppl): 222S-225S. Review. PMID: 16002825.</p>	<p>Did not answer question; examined weight self-monitoring.</p>
<p>Woo J, Sea MM, Tong P, Ko GT, Lee Z, Chan J, Chow FC. <u>Effectiveness of a lifestyle modification programme in weight maintenance in obese subjects after cessation of treatment with Orlistat.</u> <i>J Eval Clin Pract.</i> 2007 Dec; 13 (6): 853-859. PMID: 18070255.</p>	<p>Did not answer question; did not examine the relationship between self-monitoring of diet and weight.</p>
<p>Yon BA, Johnson RK, Harvey-Berino J, Gold BC. <u>The use of a personal digital assistant for dietary self-monitoring does not improve the validity of self-reports of energy intake.</u> <i>J Am Diet Assoc.</i> 2006 Aug; 106 (8): 1, 256-1, 259. PMID: 16863723.</p>	<p>Did not include weight in analyses.</p>